

Secure Coding and Higher Education



A photograph showing two large brown bison in a fenced-in area, possibly a sports court. One bison is on the left, and another is on the right. In the background, a man in a blue uniform and a man in a white shirt are visible. The scene is outdoors with a chain-link fence and a green tarp in the background. A yellow object is visible in the bottom left corner.

My feelings about
security education

A study by CloudPassage

from 2016

Security Monitoring

VULNERABILITIES / THREATS

4/7/2016
11:00 AM



Kelly Jackson
Higgins

Top US Undergraduate Computer Science Programs Skip Cybersecurity Classes

New study reveals that none of the top 10 US university computer science and engineering program degrees requires students take a cybersecurity course.

HOT TOP

How Hackers
Steve Zurier, I

NEWS

Free and open sources software Survey 2020

Contributors spend

less than 3% of their time

on security issues



Purpose of traditional education

A wide-angle, high-angle photograph of a large, modern lecture hall. The room is filled with students seated at long, curved wooden desks arranged in a semi-circular pattern. The students are diverse in age and appearance, and many are looking towards the front of the room. The walls are decorated with horizontal panels in shades of green and brown. A lecturer is visible at a podium on the left side of the stage. The overall atmosphere is that of a busy, well-attended academic session.

Courses before

And courses now



But we still miss the foundations



source: decoist.com

A possible outcome

10.88 billion records

leaked from CAM4 in March 2020

The problem from another perspective

Universities



Businesses

Principle-driven

Mainly theoretical

Missing security
courses

Profit/Value-driven

Mainly practical

Lack of security
experts

So what's now?

Start in small

Nudges as a very first step

Security is not evil, we just don't embrace it.

Let's **rinse and twist our mindset**

Shifting from reactivity to proactivity (DevSecOps rulez)

How do you know what to do?

Developers make

hundreds of decisions every day

impacting security

A photograph of two penguins standing in a snowy, icy environment. The penguins are facing each other, and their heads are slightly bowed. A large black crosshair is centered over the image, with a white text box overlaid on it. The text box contains the text "Understand security to benefit from it" in a white, sans-serif font.

Understand security
to benefit from it

Questions?

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